Filtrate / Precipitate lab

Pre – Lab:

1. What is a precipitate?
2. What is a filtrate?

Problems:

1. How can you make 50 ml of a .2 M solution of Pb(NO3)2?
2. How can you make a solution of KI in 50 ml of distilled water?
3. When you mix your 2 reactants (above) how can you collect and dry your precipitate?

Material: see above.

Data:

|  |  |
| --- | --- |
| Mass of KI |  |
| Mass of Dried Filter paper |  |
| Mass of filter paper + precipitate after 1st drying |  |
| Mass of filter paper + precipitate after 2nd drying |  |
| Mass of filter paper + precipitate after 3rd drying |  |

Conclusion:

1. Write a balanced molecular formula for the reaction that occurred.
2. Write a balanced net ionic equation for the reaction that occurred.
3. Explain why the reaction is best represented by a net ionic equation.
4. Explain the purpose of drying and weighing the filter paper with the precipitate 3 times.
5. In the filtrate solution, is (K+) greater than, less than, or equal to (NO3-1)? Justify your answer.
6. Calculate the number of moles of precipitate that is produced in the Lab.
7. Calculate the mass percent of I- in the tablet.
8. If you did another lab and dissolved 55 ml instead of 50 ml of water, would the 5 of I- be greater than, less than or equal to the amount calculated in 7.)? Justify your answer.